PCT Chapter II
MU DG 2
ART 34 AMD

NEW PATENT CLAIMS

1. A flat antenna (A) for receiving digital or analogue broadcasts from a satellite (S),
comprising at least one layer of individual receiver elements, the elements in the layer being interconnected by means of conductive paths in such a manner that the signal's phase shift due to the position of the elements in the layer is compensated for by means of length variations in the conductive paths, where the individual receiver elements are connected in pairs to a pair collector point, the pairs are connected into sub-arrays with a sub-array collector point, the sub-arrays are connected into arrays with an array collector point, and the arrays are connected into groups with a group collector point, where the conductive paths between elements (5,8), pairs (14), sub-arrays (15), arrays (17) and/or groups (19) comprise one or several straight segments extending in a first direction, straight segments extending in a second direction perpendicular to the first direction,
characterized in that it comprises bent segments or compensation leads, wherein the bent segments comprise two or more polygonal sections and/or one or more curvilinear sections, where at least one array (17) in a group (19) is connected to a group collector (20) by means of a bent segment, and that it comprises reflector elements (R) situated in an angle to the antenna plane, where this angle is preferably 90 degrees.

2. Antenna according to claim 1,
characterized in that at least one sub-array (15) in an array (17) is connected to the array collector (18) by means of at least one straight segment extending in the third direction.

3. Antenna according to any of the preceding claims,
characterized in that it comprises layers of elements (8) for receiving horizontally polarised signals and layers of elements (5) for receiving vertically polarised signals.

4. Antenna according to any of the preceding claims,
characterized in that it is equipped with individual reflectors (R) for the individual antenna elements (5,8) or with a strip of reflectors (R) assigned to several elements.

5. Antenna according to any of the preceding claims,
characterized in that the reflector elements or individual reflectors (R) comprise perforations (P) where these perforations to facilitate transmission of the incoming waves from the satellite (S) reaching the elements (5, 8) without being blocked by the reflectors or reflector elements (R).

AMENDED SHEET

ART 34 AMDT

6. Antenna according to one of the preceding claims, characterized in that each conductive element layer (4,7) comprises a collector element (C) for signals from all the antenna groups (19), and the collector element (C) consists of a conductive path with an air gap (G), where path length is different on both sides of the gap (G), and a receiving head for receiving signals from the gaps.

7. Antenna according to one of the preceding claims, characterized in that it comprises a sheet (1) with holes (2), the width of the holes (2) being between 12mm and 15mm for the frequency band of operation.

8. An antenna according to one of the preceding claims, characterized in that it is in the form of a strip.

9. A flat antenna for receiving digital or analogue signals from a satellite, characterized in that it consists of a layer of elements that are assembled as illustrated in the drawings.